## WHAT IS CLAIMED IS:

SUP

1. A dynamic optimizing method for speed data used for preparing a speed instruction pattern fed to a servo motor in a positioning device, wherein

a speed pattern generator for calculating a desired speed pattern when a moving distance, speed, acceleration time and deceleration time are inputted is provided, and the speed pattern preparation cycle is allowed to be specified by a user without a possibility that the speed data maximum value and minimum resolution of the speed data are changed.

- 2. The dynamic optimizing method for speed data according to Claim 1, wherein a combination of the speed data maximum value and minimum resolution is allowed to be selected by a user.
- 3. The dynamic optimizing method for speed data according to Claim 1, wherein when a user specifies the speed pattern preparation cycle, the decimal part of the speed data is shifted to the right or left so as to prevent the speed data maximum value and minimum resolution from being changed.
- 4. A positioning device using a servo motor, comprising: a moving instruction input unit, a speed pattern preparation unit for inputting a moving instruction from the moving instruction input unit, a speed instruction unit for outputting

a speed instruction based on the speed instruction pattern from the speed pattern preparation unit in accordance with the speed instruction cycle specified by a user, and a servo control unit for driving the servo motor based on the speed instruction from the speed instruction unit.